K-18BA

ORDERCODE D3375

SHOWELECTRONICS FOR PROFESSIONALS

Congratulations!

You have bought a great, innovative product from DAP Audio.
The DAP Audio K-18BA brings excitement to any venue. Whether you want simple plug-&-play action or a sophisticated show, this product provides the effect you need.

You can rely on DAP Audio, for more excellent audio products.
We design and manufacture professional audio equipment for the entertainment industry.
New products are being launched regularly. We work hard to keep you, our customer, satisfied.
For more information: iwant@dap-audio.info

You can get some of the best quality, best priced products on the market from DAP Audio.
So next time, turn to DAP Audio for more great audio equipment.
Always get the best -- with DAP Audio !

Thank you!

DAP Audio K-18BA™ Product Guide

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WARNING

FOR YOUR OWN SAFETY, PLEASE READ THIS USER MANUAL CAREFULLY BEFORE YOUR INITIAL START-UP!

Unpacking Instructions

Immediately upon receiving this product, carefully unpack the carton and check the contents to ensure that all parts are present, and have been received in good condition. Notify the dealer immediately and retain packing material for inspection if any parts appear damaged from shipping or the carton itself shows signs of mishandling. Save the carton and all packing materials. In the event that a fixture must be returned to the factory, it is important that the fixture be returned in the original factory box and packing.

Your shipment includes:

- 1 DAP K-18BA subwoofer
- 1 IEC cable
- This user manual

⚠ Return Procedure ⚠

Returned merchandise must be sent prepaid and in the original packing, call tags will not be issued. Package must be clearly labeled with a Return Authorization Number (RMA number). Products returned without an RMA number will be refused. Highlite will not accept the returned goods or any responsibility. Call Highlite 0031-455667723 or mail aftersales@highlite.nl and request an RMA prior to shipping the fixture. Be prepared to provide the model number, serial number and a brief description of the cause for the return. Be sure to properly pack fixture, any shipping damage resulting from inadequate packaging is the customer's responsibility. Highlite reserves the right to use its own discretion to repair or replace product(s). As a suggestion, proper UPS packing or double-boxing is always a safe method to use.

Note: If you are given an RMA number, please include the following information on a piece of paper inside the box:

1) Your name
2) Your address
3) Your phone number
4) A brief description of the symptoms

Claims

The client has the obligation to check the delivered goods immediately upon delivery for any short-comings and/or visible defects, or perform this check after our announcement that the goods are at their disposal. Damage incurred in shipping is the responsibility of the shipper; therefore the damage must be reported to the carrier upon receipt of merchandise.

It is the customer's responsibility to notify and submit claims with the shipper in the event that a fixture is damaged due to shipping. Transportation damage has to be reported to us within one day after receipt of the delivery.

Any return shipment has to be made post-paid at all times. Return shipments must be accompanied with a letter defining the reason for return shipment. Non-prepaid return shipments will be refused, unless otherwise agreed in writing.

Complaints against us must be made known in writing or by fax within 10 working days after receipt of the invoice. After this period complaints will not be handled anymore.

Complaints will only then be considered if the client has so far complied with all parts of the agreement, regardless of the agreement of which the obligation is resulting.

WARNING

CAUTION!

Keep this system away from rain and moisture!

FOR YOUR OWN SAFETY, PLEASE READ THIS USER MANUAL CAREFULLY BEFORE YOUR INITIAL START-UP!

SAFETY INSTRUCTIONS

Every person involved with the installation, operation and maintenance of this system have to:

- be qualified
- follow the instructions of this manual

CAUTION! Be careful with your operations.
With a dangerous voltage you can suffer
a dangerous electric shock when touching the wires!

Before you initial start-up, please make sure that there is no damage caused by transportation. Should there be any, consult your dealer and do not use the system.

To maintain perfect condition and to ensure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes written in this manual.

Please consider that damages caused by manual modifications to the system are not subject to warranty.

This system contains no user-serviceable parts. Refer servicing to qualified technicians only.

IMPORTANT:

The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual or any unauthorized modification to the system.

- Never let the power-cord come into contact with other cables! Handle the power-cord and all connections with the mains with particular caution!
- Never remove warning or informative labels from the unit.
- Never use anything to cover the ground contact.
- Do not insert objects into air vents.
- Do not connect this system to a dimmerpack.
- Do not switch the system on and off in short intervals, as this would reduce the system's life.
- Only use system indoor, avoid contact with water or other liquids.
- Avoid flames and do not put close to flammable liquids or gases.
- Always disconnect power from the mains, when system is not used. Only handle the power-cord by the plug. Never pull out the plug by tugging the power-cord.
- Make sure you don't use the wrong kind of cables or defective cables.
- Make sure that the signals into the mixer are balanced, otherwise hum could be created.
- Make sure you use DI boxes to balance unbalanced signals; All incoming signals should be clear
- Make sure that there is sufficient room on all sides of the system for air circulation
- Make sure that the available voltage is not higher than stated on the rear panel.
- Make sure that the power-cord is never crimped or damaged. Check the system and the power-cord from time to time.

- Prevent distortion! Make sure that all components connected to the K-18BA have sufficient power ratings. Otherwise distortion will be generated because the components are operated at their limits.
- Avoid ground loops! Always be sure to connect the power amps from the K-18BA cabinets and the mixing console to the same electrical circuit to ensure the same phase!
- If system is dropped or struck, disconnect mains power supply immediately. Have a qualified engineer inspect for safety before operating.
- If the system has been exposed to drastic temperature fluctuation (e.g. after transportation), do not switch it on immediately. The arising condensation water might damage your system. Leave the system switched off until it has reached room temperature.
- Repairs, servicing and electric connection must be carried out by a qualified technician.

OPERATING DETERMINATIONS

This system is not designed for permanent operation. Consistent operation breaks will ensure that the system will serve you for a long time without defects.

If this system is operated in any other way, than the one described in this manual, the product may suffer damages and the warranty becomes void.
Any other operation may lead to dangers like short-circuit, burns, electric shock, etc.

You endanger your own safety and the safety of others!

Improper installation can cause serious damage to people and property !

Description of the device

Features

The K-18BA is a 18-inch high output processor controlled active subwoofer system designed at the DAP audio R&D department in the Netherlands. It can be used with other active fullrange-systems like the K- and P-active series to achieve more output and it features a new designed high precision 18-inch band pass cabinet which results in a relative small housing with "BIG" sound combined with the newest amplifier technology. The system is composed of a single, compact subwoofer cabinet with built in 1000 Watt RMS amplifier. Another feature is the built-in x-over with clip limiters for your active top speakers.

The DAP Audio K-18BA is a 1000W active subwoofer with a clear transient response for a minimum distortion in the low frequency range, available for a very reasonable price. The sub reproduces a low limit frequency of 38 Hz at -3dB, the maximum SPL is 134 dB. You can use the K-18BA with a whole range of active 2-way speakers e.g. K-112A, K-115A etc. You can even use passive satellite speakers powered by an additional amplifier.

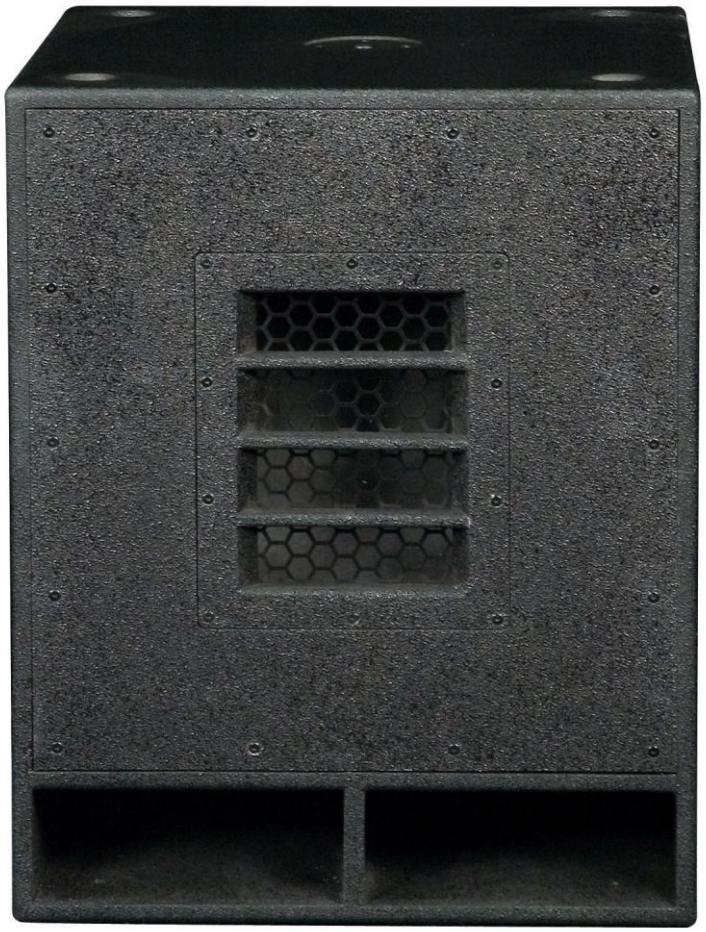


Fig. 1

Overview

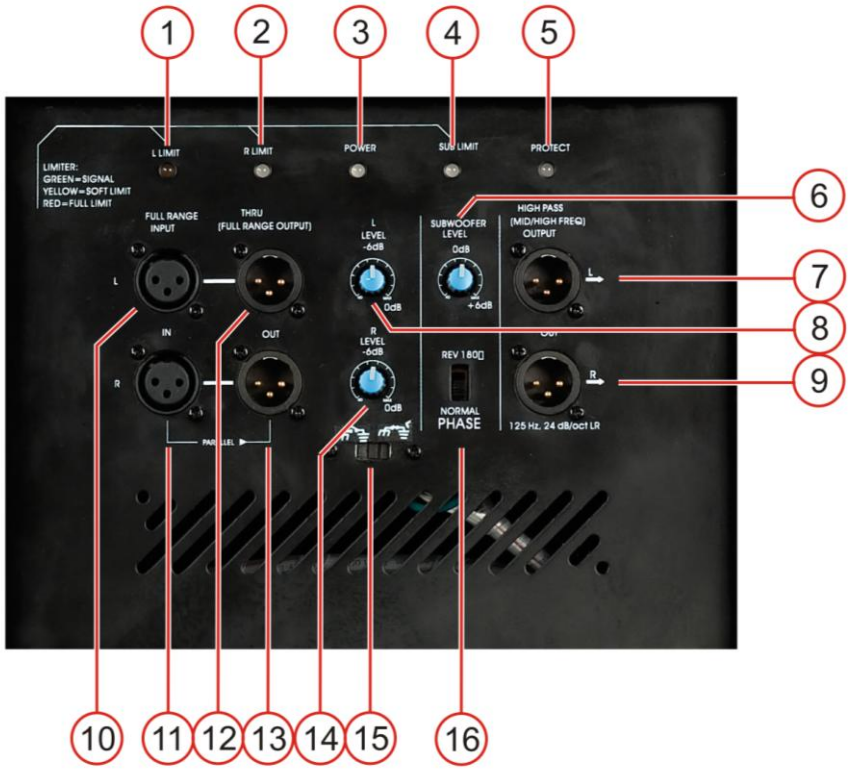


Fig. 2

1) L- limit LED
2) R- limit LED
3) Power LED
4) Sub limit LED
5) Protect LED
6) Subwoofer level
7) Channel L High Pass output
8) Channel L level
9) Channel R High Pass output
10) Channel L Full range in
11) Channel R Full range in
12) Channel L Link out
13) Channel R Link out
14) Channel R level
15) Ground lift
16) Phase switch

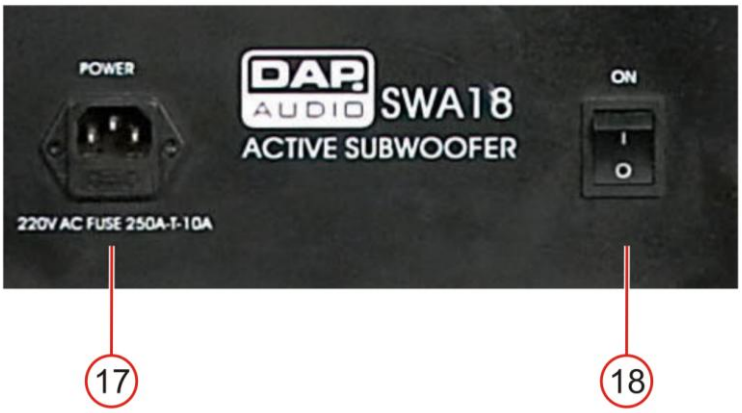


Fig. 3

17) AC Inlet with integrated fuse holder
18) Power on/off

Set Up and Operation

Before plugging the unit in, always make sure that the power supply matches the product specification voltage. Do not attempt to operate a 120V specification product on 230V power, or vice versa.

Linking Satellites / Subwoofers

Connect the cables coming from the mixer to the balanced INPUT sockets of the K-18BA. Depending on the mixer's output sockets use either a jack or XLR cable. Link the units as shown in figure 4 on page 8. Connect a standard XLR microphone cable from the first unit's THRU output socket to the second unit's INPUT socket. Repeat this process to link subsequent units. Repeat this for each stack. Make sure that when using multiple tops, they are placed with a proper projection angle.

Do not supply power before all components of the system are set up and connected properly. Make sure that the K- 18BA is always the last component, which is switched on! When shutting down, the K-18BA should be the first component, which is switched off.

Below you will find a short description of the features from the K- 18BA :

Input limit LEDs (1 + 2)
The LED shows the status of the L-R limiters. If the LED lights green it means there is an input signal, if the LED lights yellow, the limiting circuit is in soft limiting mode. If the LED lights RED, the limiter is in full limit mode. We suggest you to set the input level with the L-R level controls in such way that the LED blinks yellow occasionally. If the LED light up red continuously we strongly suggest you to lower the L-R Level controls.

Power LED (3)
Indicates that the K-18BA is switched on.

Sub Limit LED (4)
The LED shows the status of the Sub limiter. If the LED lights green it means there is an input signal, if the LED lights yellow, the limiting circuit is in soft limiting mode. If the LED lights RED, the limiter is in full limit mode. We suggest you to set the input level with the Sub level control in such way that the LED blinks yellow occasionally. If the LED light up red continuously we strongly suggest you to lower the Sub Level controls.

Protect LED (5)
Indicates that the amplifier is in protection mode. This either caused by a short circuit in the output load or a mismatch of impedance. Also check if the fans are not obstructed.

Subwoofer level (6)
This allows you to adjust the audio level for the subwoofer.

High Pass balanced out (7 + 9)
Use this socket to connect your active satellites.

Channel level (8+14)
This allows you to adjust the audio level for the satellites.

Full Range Input (10+11)
The input equipped with 3 pole XLR/ jack combo socket is electronically balanced to accept the (line) signal from any mixing console.

Thru (12+13)
This parallel output allows you to connect more bass-cabinets together.

Ground Lift (15)
When this button is pressed, it separates the signal ground from the chassis ground, enabling you to eliminate potential ground loops or low-frequency hum.

Phase switch (16)
This switch allows you to reverse the phase of the subwoofer if necessary.

IEC power inlet and fuse (17)
This connector is meant for the connection of the supplied main cord. Connect one end of the power cord to the connector, the other end to the mains, and then turn on the power switch (52) to operate the unit.
Note: Please make sure that the supply voltage matches the operation voltage before connecting the unit to mains. Replace the fuse only with a fuse of same specification (T8A).

Mains Switch (18)
Do not supply power before the whole system is set up and connected properly.

Setup example

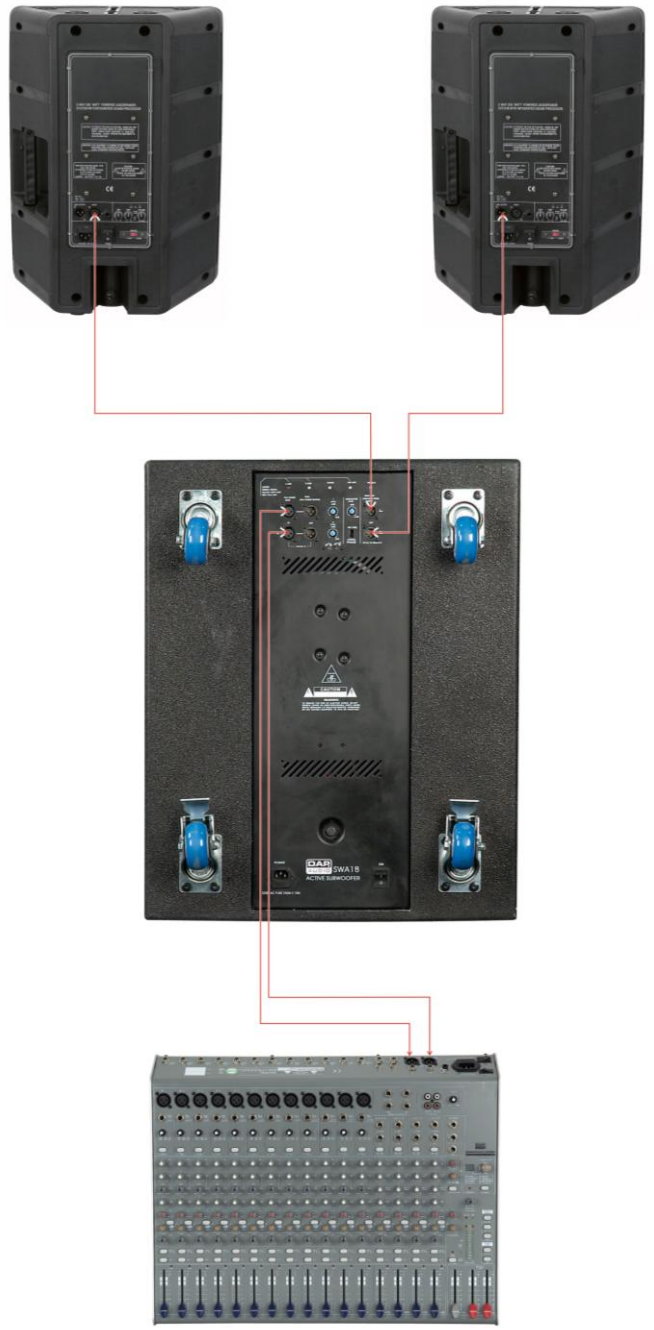
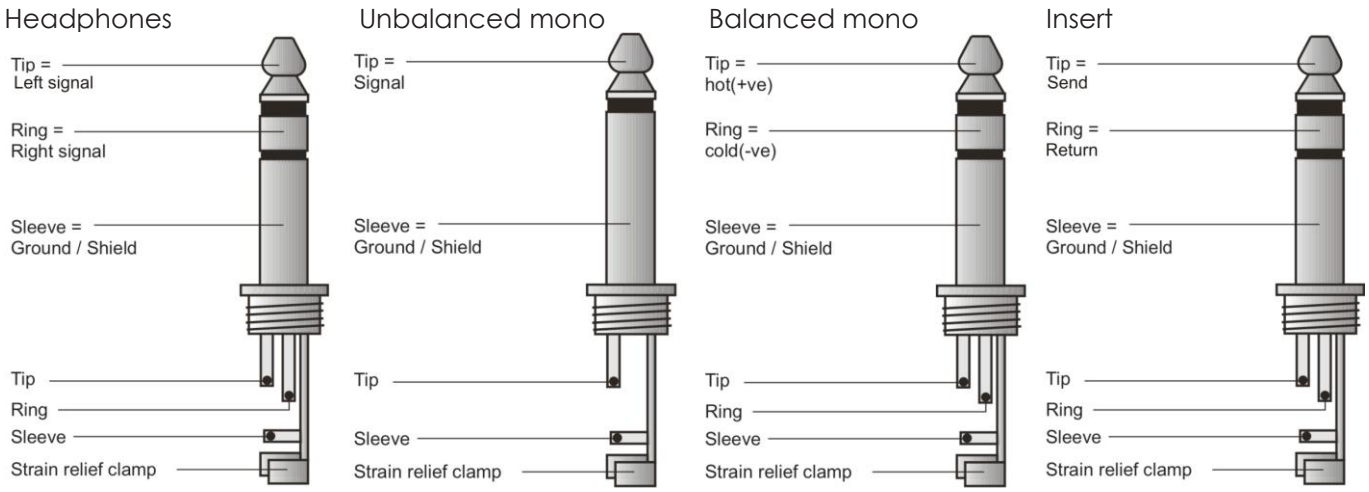
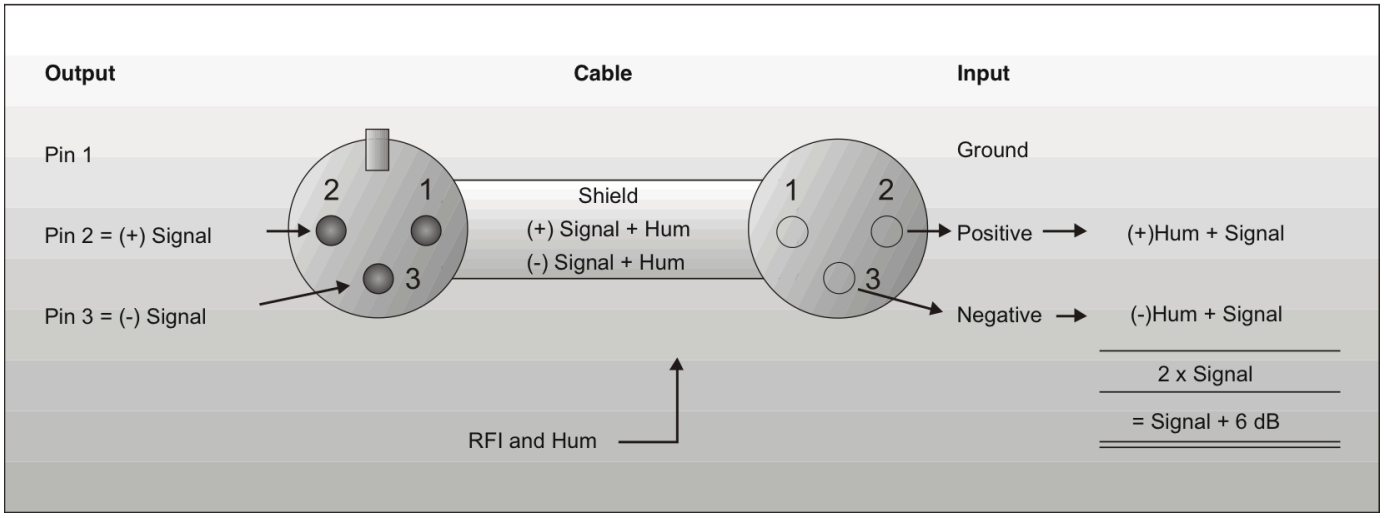


Fig. 4

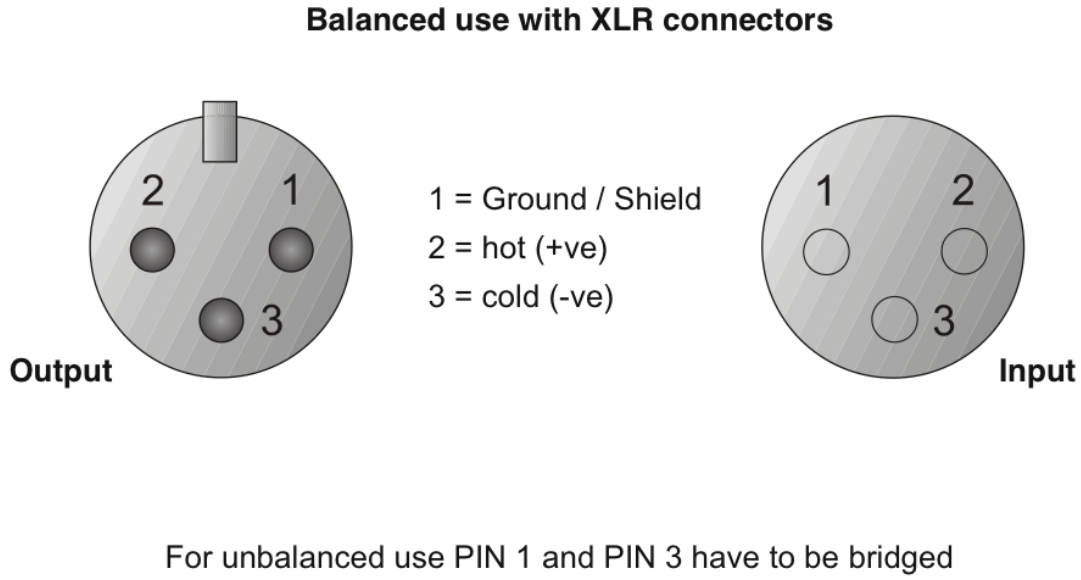
Connection Cables

Take care of your cables, always holding them by the connectors and avoiding knots and twists when coiling them: This gives the advantage of increasing their life and reliability.
Periodically check your cables. A great number of problems (faulty contacts, ground hum, discharges, etc.) are caused entirely by using unsuitable or faulty cables.





Compensation of interference with balanced connections



Maintenance

The DAP Audio K-18BA requires almost no maintenance. However, you should keep the unit clean. Disconnect the mains power supply, and then wipe the cover with a damp cloth. Do not immerse in liquid. Do not use alcohol or solvents.
Keep connections clean. Disconnect electric power, and then wipe the connectors with a damp cloth. Make sure connectors are thoroughly dry before linking equipment or supplying electric power.

Replacing a Fuse

Power surges, short-circuit or inappropriate electrical power supply may cause a fuse to burn out. If the fuse burns out, the product will not function whatsoever. If this happens, follow the directions below to do so.

1. Unplug the unit from electric power source.
2. Insert a flat-head screwdriver into a slot in the fuse cover. Gently pry up the fuse cover. The fuse will come out.
3. Remove the broken fuse. If brown or unclear, it is burned out.
4. Insert the replacement fuse into the holder where the old fuse was. Reinsert the fuse cover. Be sure to use a fuse of the same type and specification. See the product specification label for details.

Troubleshooting

DAP Audio K-18BA
This troubleshooting guide is meant to help solve simple problems. If a problem occurs, carry out the steps below in sequence until a solution is found. Once the unit operates properly, do not carry out following steps.

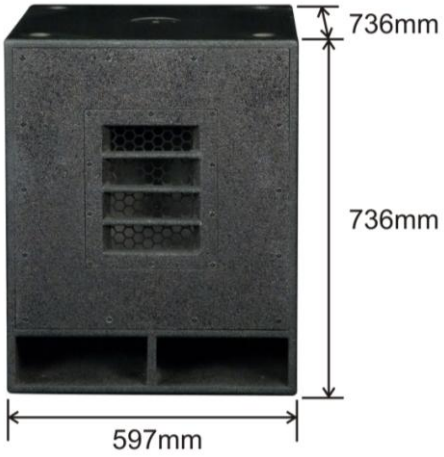
1. If the device does not operate properly, unplug the device.
2. Check power from the wall, all cables, the fuse, etc.
3. If all of the above appears to be O.K., plug the unit in again.
4. If nothing happens after 30 seconds, unplug the device.
5. Return the device to your DAP Audio dealer.

Specifications

18" active 6th order bandpass subwoofer

- Build in Limiter circuits
- Build in Loudness circuits
- Stereo XLR Inputs
- Stereo Satellites Outputs With Limiters.

• Woofer:	PB-18100220HL, 8 Ohm,
• Amplifier Output Power:	1000 Watt RMS
• Crossover Frequency:	125 Hz, 24 dB/Oct
• Freq. Response (-3 dB, -6 dB):	38 – 125 Hz
• Freq. Range (-10 dB):	32 – 160 Hz
• Sensitivity (Half Space):	104 dB / W / m
• Max SPL at 1 m (Theoretical):	134 dB
• X-over Frequency:	125 Hz, 24 dB/Oct
• Nominal Dispersion (H x V):	360° x 180°
• Dimensions (W x H x D):	597 x 736 x 736 mm



Design and product specifications are subject to change without prior notice.

CE

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HIGHLITE INTERNATIONAL BV

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